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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/519,031	03/03/2000	Hitoshi Hashimoto	P/3541-4	6484

7590 10/27/2003

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EXAMINER

YE, LIN

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 10/27/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/519,031

Applicant(s)

HASHIMOTO, HITOSHI

Examiner

Lin Ye

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 7 is/are rejected.
- 7) ☒ Claim(s) 2-6 and 8-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 6/5/00 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5,9.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akashi et al. U.S. Patent 5,615,399 in view of Iwasaki U.S Patent 5,497,215.

Referring to claim 1, the Akashi reference discloses in Figures 1, 3B, 16 and 22, an imaging apparatus comprising: a taking lens (22 in Figure 22) for forming an image of a subject on an imaging surface (110); an imaging device (201) which is constructed by arranging photoelectric conversion elements in a two dimensional array and dividing them into photoelectric conversion element groups (201P and 201Q in Figure 1) composed of combinations of lines spaced at specific intervals, and which stores the charges corresponding to the image of the subject formed by said taking lens on the imaging surface (See Col.8, lines 44-67); and driving means for driving said taking lens along the optical axis (for moving lens in focus state) on the basis of the image signal read from each of the photoelectric conversion element groups in said imaging device (See Col. 2, lines 36-54). However, the Akashi reference does not explicitly states the two element groups (201P and 201Q) have different starting time for storing (accumulating) charges.

The Iwasaki reference discloses in Figures 2-5, a imaging device (10) dividing the region to two groups (10a and 10b); and two accumulation control parts (16 and 17); wherein control means for controlling the charge storage start timing for said imaging device in such a manner that the photoelectric conversion elements belonging to the same photoelectric conversion element group in said imaging device start to store charges with the same timing and the photoelectric conversion elements belonging to another photoelectric conversion element group start to store charges with different timing (See Col. 4, lines 7-13). The Iwasaki reference is an evidence that one of ordinary skill in the art at the time to see more advantages dividing the imaging device into groups and controlling the storage (accumulation) time of the photoelectric elements in each group so that the device can appropriately measures the light of the major subject in the subject field and eliminates the smear phenomenon caused by the effects of the brightest parts of the subject field. For that reason, it would have been obvious to see the two element groups (201P and 201Q) have different starting time for storing (accumulating) charges disclosed by Akashi.

Referring to claim 7, the Akashi and Iwasaki references discloses all subject matter as discussed with respected to same comment as with claim 1.

Allowable Subject Matter

3. Claims 2-6 and 8-12 are objected to as being dependent upon a rejected base claim 1, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Referring to claims 2-4 and 8-10, the prior art does not teach or fairly suggest wherein said driving means drives said taking lens to specific positions in synchronization with the charge storage start timing for each of the photoelectric conversion element groups in said imaging device.

Referring to claims 5-6 and 11-12, the prior art does not teach or fairly suggest wherein said transfer gates transfer the charges stored in said photoelectric conversion elements to said vertical transfer section, when transfer pulses are applied to the transfer gates at specific intervals of time over a specific time beginning at the charge storage start of said photoelectric conversion elements.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - a. Sato U.S 5,943,514 discloses a focusing system has three groups light receivers; each group light receivers is either independently controlled, or a pair of outermost light receivers are controlled simultaneously.
 - b. Roberts U.S 5,541,654 discloses the image device includes provision for random access of each image element or group of image elements in the array.
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Lin Ye** whose telephone number is **(703) 305-3250**. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy R Garber can be reached on (703) 305-4929.

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Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, DC. 20231

Or faxed to:

(703) 872-9306

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal drive,
Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to the Technology Center 2600 Customer Service Office whose telephone
number is (703) 306-0377.

Lin Ye
October 17, 2003


TUAN HO
PRIMARY EXAMINER